#### We claim:

# 1. A method of preparing a compound of Formula (I)

which comprises dihydroxylating a compound of Formula (II), wherein:  $R_1$  and  $R_2$ , which may be the same or different, are independently selected from hydrogen, lower alkyl,  $(C_{3-7})$  cycloalkyl,  $(C_{3-7})$ cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or alkoxy alkyl, or  $(-CH_2NR_7R_8)$ , wherein:

- i) R7 and R8, which may be the same or different, are independently selected from hydrogen, lower alkyl, (C<sub>3-7</sub>) cycloalkyl, (C<sub>3-7</sub>) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or lower alkoxy lower alkyl; or
- ii) R7 represents hyrogen, lower alkyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or lower alkoxy lower alkyl, and R8 represents -COR9,

# wherein:

R9 represents hydrogen, lower alkyl, perhalolower alkyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, lower alkoxy, lower alkoxy lower alkyl; or

iii) R7 represents hydrogen or lower alkyl; and R8 represents diphenyl-methyl or -(CH2)tAr

#### wherein:

t is 0 to 5 and

Ar represents phenyl, furyl, pyridyl, N-methylpyrrolyl, imidazolyl optionally substituted with one or more substituents selected from hydroxy, methyl, halogen, and amino; or

iv) R7 and R8 taken together with the linking nitrogen form a staturated 3 to 7 atom heterocyclic group of formula (IA)



wherein:

Y represents O, S, SO, SO<sub>2</sub>, CH<sub>2</sub> or NR<sub>10</sub>,

### wherein:

R<sub>10</sub> represents hydrogen, lower alkyl, perhalo lower alkyl, aryl, aryl substituted with one or more substituents selected from lower alkyl,

lower alkoxy, halogen, nitro, amino, lower alkyl amino, perhalo-lower alkyl, hydroxy lower alkyl, lower alkoxy lower alkyl groups or

-COR<sub>11</sub>,

#### wherein:

R<sub>11</sub> represents hydrogen, lower alkyl, perhalo-lower alkyl, lower alkoxy, aryl, aryl substituted with one or more substituents selected from lower alkyl, perhalo-

iower alkyl, hydroxy lower alkyl, lower alkoxy lower alkyl groups; or

 $R_3$  and  $R_4$  are independently selected from hydrogen, lower alkyl,  $(C_{3-7})$ cycloalkyl,  $(C_{3-7})$ cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or alkoxy alkyl; or

 $R_3$  and  $R_4$  taken together form a saturated 5 to 6 atom heterocyclic group of formula (IB)

wherein,

n represents the integer 1 or 2; or

R<sub>3</sub> represents -OCONR<sub>12</sub>R<sub>13</sub>, wherein,

R<sub>12</sub> and R<sub>13</sub>, which may be the same or different, are independently selected from hydrogen, a substituted or unsubstituted alkyl group with 1-4 carbon atoms or a substituted or unsubstituted carbocyclic or heterocyclic group, with the proviso that when both R<sub>12</sub> and R<sub>13</sub> are substituted or unsubstituted alkyl groups, they may be combined together with the nitrogen atom, to which they are bonded, to form a heterocyclic ring which may be interrupted with -O-, -S- and/or >N-R<sub>14</sub> in which R<sub>14</sub> is hydrogen, a substituted or unsubstituted alkyl group with 1-4 carbon atoms or a substituted or unsubstituted phenyl group, and

R<sub>5</sub> represents hydrogen or alkyl, and

R<sub>6</sub> represents hydrogen or alkyl, and

pharmaceutically acceptable salts thereof.

# 2. A compound of Formulas (II), (III), (IV), or (VI):

$$R_3$$
 $R_4$ 
 $R_1$ 
 $R_6$ 
 $R_5$ 
(II)

$$R_3$$
 $R_4$ 
 $R_2$ 
 $R_1$ 
 $R_1$ 
 $R_2$ 
 $R_1$ 
 $R_4$ 
 $R_6$ 
 $R_5$ 

(IV)

wherein:

 $R_1$  and  $R_2$ , which may be the same or different, are independently selected from hydrogen, lower alkyl,  $(C_{3-7})$  cycloalkyl,  $(C_{3-7})$ cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or alkoxy alkyl, or  $(-CH_2NR_7R_8)$ , wherein:

- i) R7 and R8, which may be the same or different, are independently selected from hydrogen, lower alkyl, (C3-7) cycloalkyl, (C3-7) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or lower alkoxy lower alkyl; or
- ii) R7 represents hyrogen, lower alkyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or lower alkoxy lower alkyl, and R8 represents -COR9,

## wherein:

R9 represents hydrogen, lower alkyl, perhalolower alkyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>) cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, lower alkoxy, lower alkoxy lower alkyl; or

iii) R7 represents hydrogen or lower alkyl; and R8 represents diphenyl-methyl or -(CH2)tAr

wherein:

t is 0 to 5 and

Ar represents phenyl, furyl, pyridyl, N-methylpyrrolyl, imidazolyl optionally substituted with one or more substituents selected from hydroxy, methyl, halogen, and amino; or

iv) R7 and R8 taken together with the linking nitrogen form a staturated 3 to 7 atom heterocyclic group of formula (IA)



wherein:

Y represents O, S, SO, SO<sub>2</sub>, CH<sub>2</sub> or NR<sub>10</sub>.

wherein:

R<sub>10</sub> represents hydrogen, lower alkyl, perhalo lower alkyl, aryl, aryl substituted with one or more substituents selected from lower alkyl,

lower alkoxy, halogen, nitro, amino, lower alkyl amino, perhalo-lower alkyl, hydroxy lower alkyl, lower alkoxy lower alkyl groups or

-COR<sub>11</sub>,

wherein:

R<sub>11</sub> represents hydrogen, lower alkyl, perhalo-lower alkyl, lower alkoxy, aryl, aryl substituted with one or more substituents selected from lower alkyl, perhalo-

lower alkyl, hydroxy lower alkyl, lower alkoxy lower alkyl groups; or

 $R_3$  and  $R_4$  are independently selected from hydrogen, lower alkyl,  $(C_{3-7})$ cycloalkyl,  $(C_{3-7})$ cycloalkyl lower alkyl, lower alkenyl, hydroxy lower alkyl, or alkoxy alkyl; or

R<sub>3</sub> and R<sub>4</sub> taken together form a saturated 5 to 6 atom heterocyclic group of formula (IB)

wherein,

n represents the integer 1 or 2; or

R<sub>3</sub> represents -OCONR<sub>12</sub>R<sub>13</sub>, wherein,

 $R_{12}$  and  $R_{13}$ , which may be the same or different, are independently selected from hydrogen, a substituted or unsubstituted alkyl group with 1-4 carbon atoms or a substituted or unsubstituted carbocyclic or heterocyclic group, with the proviso that when both  $R_{12}$  and  $R_{13}$  are substituted or unsubstituted alkyl groups, they may be combined together with the nitrogen atom, to which they are bonded, to form a heterocyclic ring which may be interrupted with -O-, -S- and/or >N- $R_{14}$  in which  $R_{14}$  is hydrogen, a substituted or unsubstituted alkyl group with 1-4 carbon atoms or a substituted or unsubstituted phenyl group, and

R<sub>5</sub> represents hydrogen or alkyl, and

R<sub>6</sub> represents hydrogen or alkyl, and

pharmaceutically acceptable salts thereof.

- 3. A compound selected from the group consisting of:
  - 4-Ethyl-1H-pyrano[3,4-c]pyridin-8-one;
  - 4-Ethyl-7-[7-iodo-9-[(4-methyl-piperazinyl)methyl]-2,3-dihydro-[1,4]dioxino[2,3-g]quinolin-8-ylmethyl]-1H-pyrano[3,4-c]pyridin-8-one;
  - 11H-1,4-Dioxino[2,3-g]pyrano[3'4':6,7]indolizino[1,2-b]quinoline-12(14H)-one,8-ethyl-2,3-dihydro-15-[(4-methyl-1-piperazinyl)methyl]; or
  - 11H-1,4-Dioxino[2,3-g]pyrano[3',4':6,7]indolizino[1,2-b]quinoline-12(8H,14H)- one,8-ethyl-2,3-dihydro-8,9-dihydroxy-15-[(4-methyl-1-piperazinyl)methyl]- (9R-cis).